

REMARKS

Claims 1, 2, 4-6, 8-15 and 17 are pending in this application. Claims 5-6, 8-15 and 17 are withdrawn. By this Amendment, claim 1 is amended and claims 3, 7 and 16 are canceled. Reconsideration of the present application based on the above amendments and the following remarks is respectfully requested.

The Office Action rejects claims 1, 2 and 4 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,025,607 to Ohori and U.S. Patent No. 6,078,060 to Shibuya; and claims 1 and 2 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0068372 to Kunii. These rejections are respectfully traversed.

With regard to the election of species requirement, the Office Action asserts, in part, that:

"[T]he application includes claims to distinct species making election of a single disclosed species proper. Furthermore, since claims 5, 6, 8-11 and 17 are not readable on the second embodiment (Figs. 4 and 5 do not show a switching transistor), 5, 6, 8-11 and 17 have been withdrawn."

Based on the Office Action's assertion, the Office Action appears to withdraw claims 5, 6, 8-11 and 17 simply because Figs. 4 and 5 do not show a switching transistor. However, this argument is improper and misplaced. For example, the different embodiments, identified as species by the Examiner, are different embodiments of a thin-film transistor and not, generally, of a switching circuit. The different embodiments may be part of a switching circuit. As such, the Patent Office's assertion that claims 5, 6, 8-11 and 17 are not readable on Figs. 4 and 5 is misplaced because these figures show devices that are, in exemplary embodiments, part of a switching circuit. Thus, it is respectfully requested that claims 5, 6, 8-11 and 17 be rejoined and examined.

With regard to the claim rejections, none of the applied art discloses a thin-film transistor, comprising an active region, a source region, and a drain region, an area of a cross

section of the source region being approximately equal to an area of a cross section of the drain region, the lightly doped impurity regions being provided in an asymmetrical form in which the lightly doped impurity region in the source region is smaller than the drain region.

Ohuri discloses that the cross-sectional area of the source region (21B and 21F) (Figs. 1B and 1C) is different than the cross-sectional area of the drain region (21 or 21C and 21G) (Figs. 1B and 1C). Shibuya may disclose similar cross-sectional areas of the source region (111) (Figs. 3B) and the drain region (113) (Figs. 3D), but discloses that the length of the lightly doped region (130) located close to the drain region (113) is made larger than that of the lightly doped regions (128) located close the source region (111) (col. 11, lines 66 - col. 12, line 2). Kunii may disclose similar cross-sectional areas of the source region (S) (Nch-TFT-CKT) and drain region (D) (Nch-TFT-CKT), but discloses that that the length of the lightly doped region (LDD) located close to the drain region (D) (Nch-TFT-PXL), is made larger than that of the lightly doped region (LDD) located close to the source region (S/D) (Nch-TFT-PXL) (Fig. 8H).

As such, Ohori fails to disclose that the cross-sectional area of the source region is approximately equal to the cross-sectional area of the drain region.

Shibuya fails to disclose that if the length of the lightly doped region (130), located close to the drain region (113), is made larger, the cross sectional areas of the source region and the drain region would remain approximately equal. Instead, it can be understood from Shibuya, that if the length of the lightly doped region (130), located close to the drain region (113), is made larger, the cross sectional area of the drain region would be greater than the cross sectional area of the source region.

Similarly, in Kunii, because the length of the lightly doped region (LDD) (Nch-TFT-PXL), located close to the drain region (D) (Nch-TFT-PXL), is made larger, the cross

sectional area of the drain region (D) (Nch-TFT-PXL) is larger than the cross sectional area of the source region (S/L) (Nch-TFT-PXL) (Fig. 8H).

As such, none of the applied art disclose all of the features of claim 1. Thus, for at least the reasons discussed above, it is respectfully submitted that claim 1 is distinguishable over the applied art. Furthermore, claims 2 and 4, which depend from claim 1, are likewise distinguishable over the applied art for at least the reasons discussed above, as well as for the additional features they recite. Accordingly, withdrawal of the rejections is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,


James A. Oliff
Registration No. 27,075

Jude L. Cooney
Registration No. 54,045

JAO:JLC/aaw

Date: **October 28, 2004**

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--